

REMARKS

In the above-identified Office Action certain corrections were suggested with respect to Claims 4, 14, and 15. In response, Applicants have adopted those suggestions for Claims 4 and 14, while cancelling Claim 15.

Furthermore, Claims 12 and 14 were rejected for use of the phrase “laying out a list image to display a list of pieces of information” (Claims 1 and 14); and “making a plane of the first image” (Claim 2). In response, Claims 1 and 14 have been amended to specify that the virtual space image generation provides for “generating the display image of the virtual space”, in which the laid out list image and the virtual object are included. Also, the portions of Claims 2 and 3 that were deemed unclear as specified in paragraph 4 of the Office Action, have been deleted.

Referring now to the patentability of the present invention Applicants note that Claim 1 is directed to a system for presenting a mixed reality using a HMD (head mounted display), and is directed more particularly to controlling a position of a list image representing a list of pieces of information about one or more parts included in a virtual object. Generally, a display area of the HMD is relatively small. Thus, when all of parts are displayed on the display area of the HMD, it is difficult for a user wearing the HMD to observe other contents displayed on the display area such as virtual objects, physical space image, and the like. Furthermore, when the list image is laid out at arbitrary position in the virtual space, a sense of discomfort is generated with regard to depth direction between the list image and another display contents.

In order to solve these problems, according to the invention as set forth in

Claim 1, a position of the list image in the virtual space is calculated based on the positions of the viewpoint and the pointing device. The calculated position of the list image is near the position of the pointing device and closer to the position of the viewpoint than that of the pointing device. Furthermore, the list image represents a list of pieces of information about one or more parts, included the virtual object, near the position of the pointing device.

Referring now to the cited prior art, the Kato patent discloses a system as shown in Fig. 1 thereof. In that system, a user utilizes a device 3A to operate an operation unit (as shown in Fig. 10) displayed at a display device 2. Furthermore, Kato discloses a case of displaying a virtual space corresponding to a city designated by a user. However, Kato fails to disclose or suggest a technique for calculating the position, in the virtual space, of the list image. The Office Action states that the menu 37 (as shown in Fig. 18 of Kato) corresponds to the list image in Claim 1. However, the menu 37 is displayed at a fixed position; that is, a position of the menu 37 is not calculated dynamically, e.g. according to a position of a viewpoint of the user. Furthermore, the position of the menu 37 is not a three-dimensional position in a virtual space. Thus, as described above, it is clear that the menu 37 does not correspond to Applicants' list image.

For these reasons the Kato patent fails to teach or suggest a technique for calculating a position of a list image in the virtual space based on the positions of the viewpoint and the pointing device.

The cited reference Buxton patent discloses a method of controlling a transparency. However, Buxton also fails to teach or suggest a technique for calculating a position of a list image in the virtual space based on the positions of the viewpoint and the

pointing device. Moreover, it is seen that the disclosures of the cited Buxton and Stroyan patents do not overcome the above-noted deficiencies of Kato as a rejecting reference.

Thus, it is believed that the claims as now presented are patentably distinct over the cited references, wherefore the issuance of a Notice of Allowance is solicited.

The Examiner is hereby authorized to charge fees or credit overpayment to Deposit Account No. 06-1205.

Applicants' undersigned attorney can be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be sent to the below-listed address.

Respectfully submitted,

/John A. Krause/
John A. Krause
Attorney for Applicants
Registration No. 24,613

FITZPATRICK, CELLA, HARPER & SCINTO
1290 Avenue of the Americas
New York, New York, 10104-3800
Facsimile: (212) 218-2200